



Volcanic Aerosol

(continued)

Closing:

Ask again, "Do volcanoes definitely affect the climate? How can we find out?"

EVALUATION

1. Check data tables and graphs;
2. Check answers to part 5 of the activity, above. You may wish to have each student write it in the form of an essay to intergrate Language Arts.

Extension Ideas

1. Have students research a particular volcano or eruption, using the internet if access is available. Good choices include:
 - Santorini (near Greece; destroyed the Minoan civilization)
 - Tambora (and the "year without a summer")
 - Vesuvius (destroyed Pompeii and Herculaneum in 70 AD) -Mt. St. Helens (this is a good choice because of the amount of information available and because it is in the United States, so the students may be more familiar with it).
- 2.(If you have Internet access only) Browse for images from the TOMS instrument (or from any satellite) of a volcanic eruption (there are some excellent images of the Pinatubo cloud). This can be especially good if students can compare different eruptions, or successive images of the same eruption as time goes by.
3. Have students write an essay or short story about what it would be like if an extremely large eruption (VEI 7 OR EVEN 8) were to occur. Make sure they cover the effects on people (both nearby and elsewhere) and on the climate (likewise).
4. Plot both VEI and average temperature vs. time on the same graph (a blank graph form is provided for this). This can be done by having each student in the class plot 1 data point. When complete, ask student is NOW they can see a correlation between volcanoes and climate!

Careers Related to the Lesson Topics

1. Atmospheric Scientist
2. Land-use management
3. Volcanologist
4. Aerospace Engineer